



Tesca Basic Table Top Refrigeration Trainer 32400 is designed to provide students with a thorough understanding of various types of systems used in commercial and industrial applications. It permits students to understand the refrigeration cycle, including measurement of pressure, vacuum, flow rate and temperature.

Sight glasses at inlet and outlet of evaporator and condenser allows students to monitor changes in refrigerant state. The system components are panel mounted to provide easy access for testing and trouble-shooting.

#### List of Experiments

- Basic function of refrigeration control components, such operating principles and common fault & trouble shooting method
- Study of COP calculation in Refrigeration Cycle
- Troubleshooting of refrigeration cycle failure symptom and caused
- Basic electric control circuit and system of common air Conditioning system
- Investigation on the operation of the compressor
- Familiarization with the operating of metering devices, for instance, thermostatic expansion valve, automatic expansion valve, capillary tube
- Study on the principles of evaporator and condenser – superheating and sub cooling, heat exchanger
- Investigation of refrigeration system

#### Technical Specifications

- Compressor
  - ♦ Hermetic : 450 Watt
  - ♦ Refrigerant : R-134A
  - ♦ Voltage : 240
- Condenser
  - ♦ forced air coil with variable speed fan
- Control devices
  - ♦ Low pressure switch
  - ♦ High pressure switch
  - ♦ Thermostatic expansion valve
  - ♦ Solenoid valves
  - ♦ Thermostatic controller
  - ♦ Wattmeter, Voltmeter, Ammeter
  - ♦ Thermometer
- Safety features
  - ♦ Safety pressure switch
  - ♦ Main breaker switch
  - ♦ Compressor breaker switch
- Evaporator
  - ♦ Air Cooled Type

#### Scope of Delivery:

- Operating instructions, Student experiment book, Teacher's answer book.

Note: Specifications are subject to change.

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